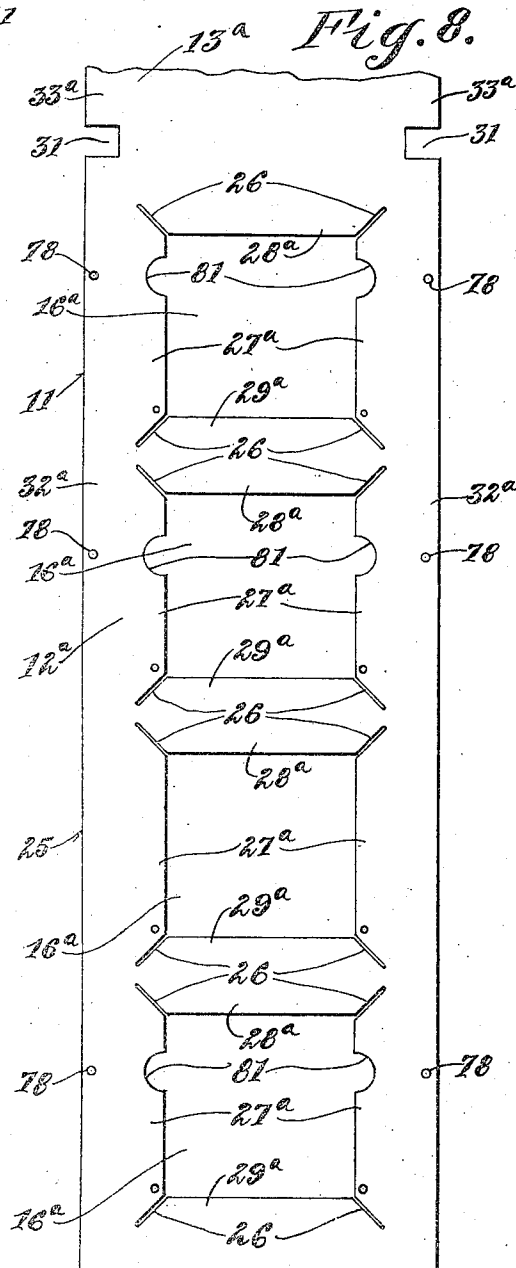
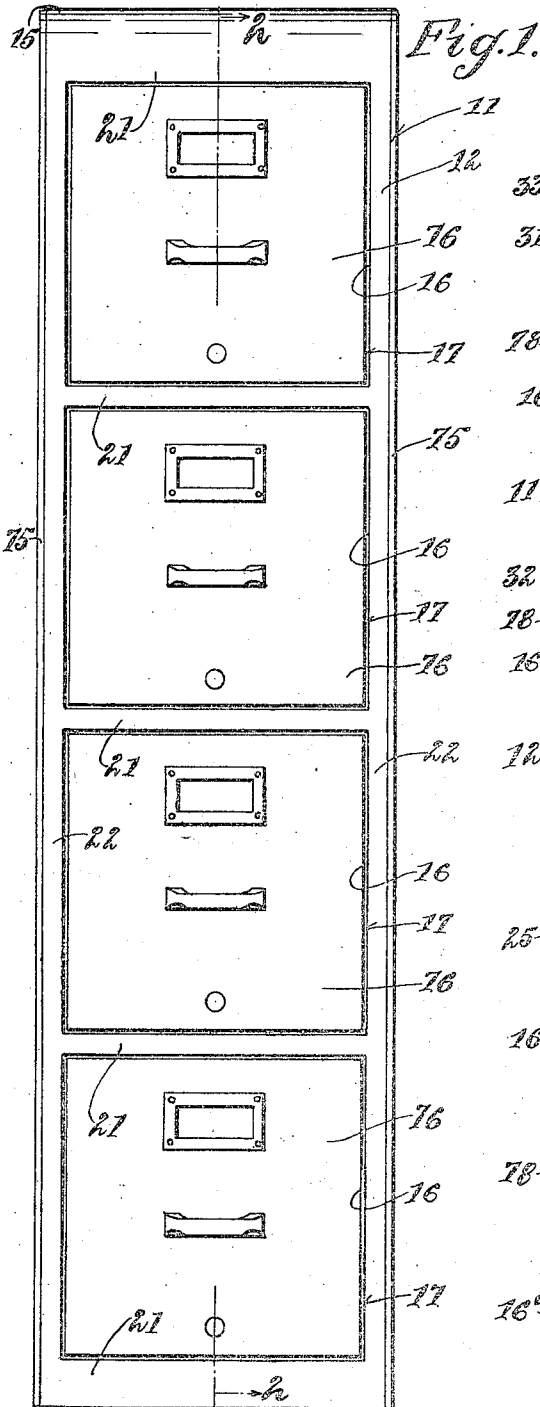


P. S. MILLICE.
METAL FILING CABINET.
APPLICATION FILED AUG. 18, 1911.

1,060,691.

Patented May 6, 1913.

3 SHEETS—SHEET 1.

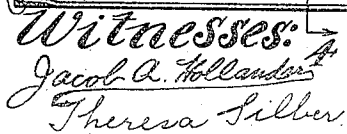


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Inventor:
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3 SHEETS—SHEET 2.



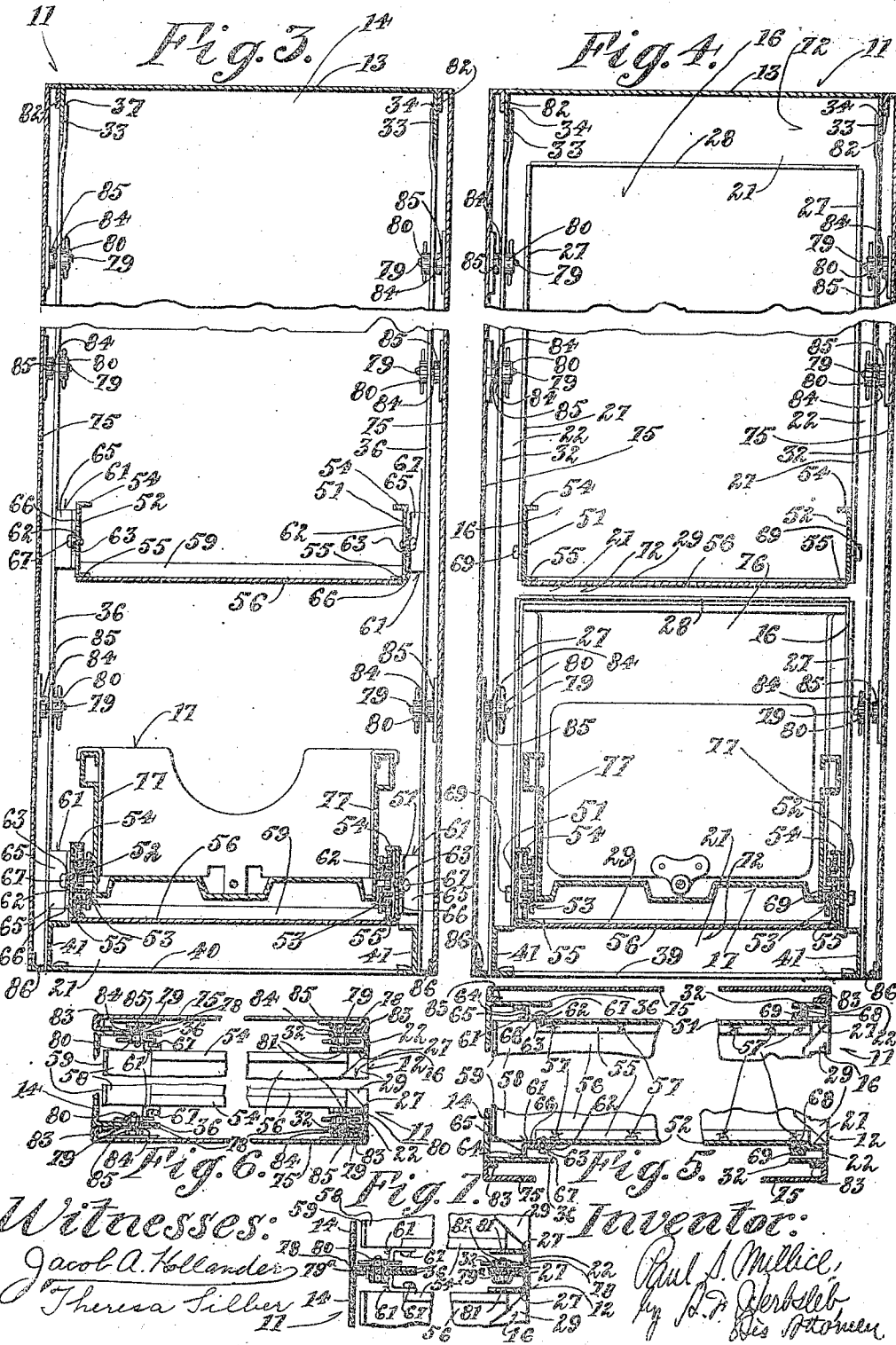
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UNITED STATES PATENT OFFICE.

PAUL S. MILLICE, OF HAMILTON, OHIO, ASSIGNOR TO FIRE-PROOF FURNITURE AND CONSTRUCTION COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

METAL FILING-CABINET.

1,060,691.

Specification of Letters Patent.

Patented May 6, 1913.

Application filed August 18, 1911. Serial No. 644,745.

To all whom it may concern:

Be it known that I, PAUL S. MILLICE, a citizen of the United States, residing at Hamilton, in the county of Butler and State of Ohio, have invented certain new and useful Improvements in Metal Filing-Cabinets, of which the following is a specification.

My invention relates to metal filing cabinets and is concerned primarily with the stationary parts of such cabinets.

My invention has for its object the provision of new and improved construction of the framing of the cabinet, further the provision of new and improved composite drawer runway and shelf, further the provision of new and improved means for attaching the shelves and drawer runways, and further the provision of new and improved means for conveniently assembling adjacent sections of a so-called vertical filing cabinet, and for securing side panels in place.

My invention consists in the novel means employed for accomplishing the above-named objects, and in the construction, arrangement and combinations of parts herein-after more fully described and claimed.

In the drawings: Figure 1 is a front elevation of my improved filing cabinet. Fig. 2 is a vertical longitudinal section of the same, taken on the line 2—2 of Fig. 1. Fig. 3 is a vertical cross-section of the same, partly broken away, taken on the line 3—3 of Fig. 2. Fig. 4 is a vertical cross-section of the same, partly broken away, taken on the line 4—4 of Fig. 2. Fig. 5 is a horizontal section, partly broken away, taken on the line 5—5 of Fig. 2, showing the connections between the ends of the drawer composite runway and shelf and the frame. Fig. 6 is a detail in horizontal section on the line 6—6 of Fig. 2, showing the means of securing the end panel to the cabinet-section. Fig. 7 is a horizontal sectional detail showing the means for connecting two adjacent cabinet-sections; and, Fig. 8 is a front elevation showing the blank from which the framing of the cabinet is formed, the blank being partly broken away.

My invention relates particularly to so-called metal upright filing cabinets and my improved device is preferably so constructed

that the cabinet may comprise a single section or the same may be built up of a plurality of vertical sections arranged side by side, novel connecting means being provided. Interchangeable side-panels are provided both of which may be secured to a single cabinet-section, and either of the same may be removed for the insertion of an additional cabinet-section, the side-panels being arranged to be secured at the sides of the collective connected cabinet-sections, when more than one of these sections is employed.

11 represents the framing of the cabinet-section, the front 12 and top 13 of which are preferably integral with each other, the back 14 being also shown integral with the front and top. The front and top preferably merge into each other with a curved top fascia 15, providing a neat integral construction.

The front of the cabinet is provided with drawer openings 16 for the reception of drawers 17, the lower one of which is shown. Cross-braces 21 are located between the drawer openings, and these braces are integral with the front of the framing of the cabinet, forming connecting ribs between the side uprights 22 integral with the latter, thereby providing a rigid construction of extremely neat appearance and a construction in which there is no danger of shifting or separation of the parts, or the formation of seams or breaks between the cross-braces and side uprights of the cabinet, the formation of such seams or breaks being an objection in prior constructions, where the cross-braces were separate pieces secured to the side uprights, these seams or breaks appearing in such prior constructions during shipment or after slight use irrespective of the manner employed of securing the parts together.

I have in Fig. 8 shown a blank of preferred form from which the framing of the front and top of the cabinet-section is formed. This blank is indicated at 25, in which openings 16^a are provided, having diagonal cuts 26, at the corners thereof for forming side wings 27^a, a top wing 28^a, and a bottom wing 29^a, these wings being bent inwardly for respectively forming flanges

27, 28 and 29, which form the walls of the drawer openings 16.

The front portion 12^a of the blank is provided with side wings 32^a extending longitudinally thereof, and the top portion 13^a of the blank is provided with side wings 33^a extending longitudinally thereof, these wings having recesses 31 between them. These wings are bent rearwardly at right angles to the planes of the said front and rear portions for respectively forming rearwardly and downwardly extending flanges 32 and 33, the adjacent ends of these flanges overlapping as shown at 34, the overlapping corners being rigidly connected together preferably by electric spot welding, shown at 35.

The side uprights 22 are formed by the bending of the flanges 32 and 27, and the connecting ribs therebetween which are integral therewith are formed by the bending of the flanges 28 and 29, forming a connected integral U-shaped channel structure, comprising U-shaped channels extending at right angles to each other and opening into each other.

The side edges of the back 14 are provided with forwardly extending flanges 36, the adjacent corners of the flanges 36 and 33 overlapping, as shown at 37, the overlapping corners being rigidly connected, as by electric spot welding, shown at 38.

The lower ends of the front and back are turned for forming reinforcing flanges 39 and 40, and the lower ends of the fronts and backs at the respective sides, are connected by channel strips 41 which overlap the flanges 32 and 36 respectively, as shown at 42 and 43, where they are rigidly secured together, as by electric spot welding, shown at 44 and 45.

51 and 52 are runways shown of channel form having the mouths of the channels opening inwardly or toward each other and adapted to receive suitable drawer suspensions shown at 53, between the upper and lower flanges 54 55, of said runways. The drawers are supported by these runways, being guided by anti-friction rollers in such manner as to provide ease of movement of the drawers in and out, and to permit the drawers to be drawn forwardly the full lengths thereof, but preventing accidental removal of the drawers. These suspensions may be of suitable construction.

56 is a shelf secured at its side edges to a pair of the runways 51 and 52, preferably at the lower faces of the lower flanges of said runways by electric spot welding, shown at 57, the shelf having a rear extension 58 which extends to the rear of the runways, preferably terminating in a rear upturned flange 59. The shelves serve the purpose of separating the spaces for the respective

drawers and in reinforcing the cabinet. The shelf and the runways at the sides thereof form a composite structure readily insertible in and removable from the framing, the upper structures being omitted in the drawings.

61, 61 are brackets rigidly secured to the flanges 36. These brackets are provided with front notches 62, preferably opening forwardly for receiving pins 63 on the runways. The brackets are preferably formed with a base 64, secured to the flange 36, a laterally extending web 65, and a forwardly extending web 66, the notch 62 being in the front end of the forwardly extending web 66, and the pin is preferably provided with a head 67, the forwardly extending webs 66 being received between the side faces of the runways and the heads of the pins for laterally positioning the runways. The forward end of the shelf is received under the bottom flange 29 of the drawer opening.

The composite runway and shelf is preferably secured in place by means of screws 68, received through the runways located at one side of the side flanges 27 and threaded into nuts 69 at the other side of the side flanges 27, these nuts being preferably spot-welded to the said flanges by electricity. The fronts of the shelves when in position are spaced from the front walls of the cross-braces or ribs 21, by a space 71.

The construction provides a ready means for assembling the parts or removing the composite runway and shelf. Thus if it is desired to insert the composite runway and shelf, the composite runway and shelf is inserted into the drawer opening, with the rear end thereof slanting upwardly so as to permit the front end of the shelf to be received under the bottom flange 29, that is, into the rearwardly extending mouth 72 of the front brace or rib 21, as shown by the slanting position of one of the composite structures shown in Fig. 2, the shelf being then pushed forwardly into said mouth. When in such forward position, the rear end of the composite runway and shelf is readily lowered and the pins 63 are readily received into the forwardly opening mouths of the notches 62, whereupon the composite runway and shelf is pushed rearwardly for seating the pins in said notches, the screws 68 being thereupon inserted for securing the parts in place.

75, 75 represent the side panels, which are releasable, and are preferably arranged for fitting either side of the cabinet-section so as to make the same interchangeable at the right and left hand side wall of the cabinet.

The drawers respectively comprise a front and side walls 77, which latter extend upwardly only to a part of the height of the front of the drawer. The flanges 32 and

36, in positions above the ranges of the side walls 77 of the drawers, are provided with apertures 78, through which bolts 79 are received. These bolts are secured to the side panels and extend inwardly into the cabinet-section and are arranged to receive nuts 80 for clamping the side panels to the framing of the section, the side flanges 27 being provided with recesses 81 in positions above the side walls of the drawers, thereby enabling the securing means for the side panels to be removed and put in place without removal of the drawers of the cabinet, permitting ease in assembling and dismantling the parts, especially when an additional cabinet-section is inserted alongside of one already in use. The bolts 79, apertures 78, and recesses 81 are placed equidistantly from the respective front and rear walls of the cabinet and side panel, and at similar distances from the tops of the cabinet-section and side panel, for permitting a given side panel to be attached to either side of any cabinet-section.

Each of the side panels at its front, top and rear is provided with a lateral bend 82, and an inturned flange 83, the latter of which is adapted to impinge the inturned flanges 32, 33 and 36 of the frame of the cabinet-section and when assembled the flanges 32 and 36 are spaced laterally, as shown at 84, from the socket-piece 85 of the bolt 79 for insuring firm clamping between the side panel and the framing of the cabinet. The bottom of the side panel may have a reinforcing angle-piece 86, secured thereto, preferably by electric spot welding.

If it is desired to secure two cabinet-sections side by side, bolts 79^a may be received through adjacent apertures 78, nuts 80 being received thereover for securely clamping the adjacent flanges 32, 36 together.

My improved construction permits the cabinet-sections to be made of light or thin sheet metal, and forms a very rigid, strong and economical construction, renders the lateral building up of the cabinet simple and easy, provides composite runways and shelves of strong and simple form readily assembled in the cabinet-section and so arranged as to add extreme rigidity to the latter.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent is:

1. An open-sided framing for a filing cabinet comprising a front portion having drawer openings therein and formed with side uprights having outer rearwardly extending flanges between which cross-braces are located which are integral with said side uprights and formed with rearwardly extending flanges bent from the body of said framing.

2. A framing for a filing cabinet comprising a front portion and a top portion integral with each other, the said portions being provided respectively with side flanges which overlap at the upper corners at the respective sides of said framing, the front portion of said framing being provided with drawer openings formed with side flanges which with said first named side flanges thereon form side uprights of said framing, and said front portion being further provided with top and bottom flanges forming cross-braces between said drawer openings integral with said side uprights.

3. An open-sided metal framing for a vertical filing cabinet comprising a front portion and top portion integral with each other, each of said portions formed with a side flange at each side thereof, the said flanges at the respective sides of said framing overlapping each other at the upper front corner of said framing, and the said overlapping portions of said flanges being secured together.

4. In a vertical filing cabinet, a metal framing comprising a front portion and a top portion integral with each other and formed from a blank having laterally extending wings at said front portion and said top portion having a recess therebetween at each side of said portions, said wings being bent back for forming side flanges which overlap at said recesses, and the said overlapping portions being welded together.

5. In a vertical filing cabinet, a framing having a front portion provided with drawer openings at the bottoms whereof an inwardly extending flange is located, the said framing comprising a rear portion, a drawer runway at each side of said framing and a shelf secured to said runways for forming a composite runway and shelf structure, the front end of said shelf arranged to pass the rear edge of said rearwardly extending flange in forward direction, securing means between the rear end of said composite structure and said rear portion of said framing arranged to coact for supporting the rear portion of said composite structure by the rearward movement of the latter after said shelf has been received under said front flange, and securing means between the said front portion and said composite structure.

6. In a vertical filing cabinet, the combination of a framing comprising a front portion and a rear portion, a composite structure comprising drawer runways and a shelf, the rear portion of said composite structure and the rear portion of said framing having supporting means therebetween comprising coacting lugs and notches arranged

ranged to be brought into coacting relation by the rearward movement of said composite structure, and securing means between said front portions of said framing and composite structure.

7. In a vertical filing cabinet, the combination of a framing comprising a front portion provided with drawer openings and having front cross-braces between said opening embracing a rearwardly extending flange, a composite structure comprising drawer runways and a shelf, the rear portion of said framing provided with notches having forwardly opening mouths and the rear portion of said composite structure provided with headed lugs coacting with said notches, the front end of said composite structure received under said front flange, the said headed lugs being positioned on said composite structure in such relation that they are out of range of said notches when said composite structure is in forward position under said flange and arranged to coact with said notches when said composite structure is moved rearwardly under said flange and while being retained thereunder, and securing means between the front portion of said composite structure and said front portion of said framing, substantially as described.

8. In a vertical filing cabinet, a framing comprising drawer spaces and a front portion having drawer openings therein in line with said drawer spaces, drawers received in said openings having fronts for closing said openings and side walls of less height than said fronts, a releasable side panel for said framing, and securing means between said side panel and framing located within the lateral projections of said drawer spaces above said side walls of said drawers.

9. In a vertical filing cabinet, the combination of a framing comprising a front portion and a rear portion having side flanges extending toward each other, said front portion provided with drawer openings and said framing comprising drawer spaces in line with said openings, drawers for said spaces comprising fronts which close said openings and side walls of less height than said fronts, a side panel having inner flanges projecting toward each other arranged to impinge said flanges of said framing, and clamping means between said side panel and flanges of said framing within the lateral projections of said drawer spaces and above said side walls of said drawers.

10. In a vertical filing cabinet, the combination of a framing having a front portion and a rear portion provided with side flanges projecting toward each other, said front portion provided with drawer openings and said framing provided with drawer

spaces in line with said openings, a side panel provided with lateral flanges terminating in inner flanges projecting toward each other arranged to impinge against said flanges of said framing, bolts secured to said side panel provided with shoulders which are spaced laterally from said flanges of said framing when said side panel is secured to said framing, said bolts received through said side flanges of said framing, and nuts received over the inner ends of said bolts inside said flanges of said framing for clamping the flanges of said side panel and said framing together.

11. In a vertical filing cabinet, the combination of a framing having a front portion and a rear portion provided with side flanges projecting toward each other, said front portion provided with drawer openings, and said framing provided with drawer spaces in line with said openings, a side panel provided with lateral flanges terminating in inner flanges projecting toward each other arranged to impinge against said flanges of said framing, bolts secured to said side panel provided with shoulders which are spaced from said flanges of said framing when said side panel is secured to said framing, said bolts received through said side flanges of said framing, and nuts received over the inner ends of said bolts inside said flanges of said framing for clamping the flanges of said side panel and said framing together, the front portion of said framing at said drawer openings provided with rearwardly extending side flange provided with recesses for the reception of said nuts, and said bolts, nuts and recesses being within the lateral projections of said drawer spaces above the side walls of said drawers.

12. In a vertical filing cabinet, cabinet-sections each comprising an open-sided framing embracing a front and a back portion each of which has an inwardly extending flange at each side thereof, said framings each embracing drawer spaces and said front portion provided with drawer openings in line with said drawer spaces, drawers having fronts closing said openings and side walls of less height than the height of said drawer spaces, said first-named flanges being provided with mating apertures and securing means between adjacent cabinet-sections received through said apertures, said apertures and securing means located within the lateral projections of said drawer spaces above said side walls of said drawers.

13. In a vertical filing cabinet, cabinet-sections each comprising an open-sided framing embracing a front portion and a back portion each of which has an inwardly extending flange at each side thereof, said framings each embracing drawer spaces and said front portions provided with drawer

openings in line with said drawer spaces
formed with side flanges parallel with but
spaced from said first-named flanges of said
front portions, drawers having fronts clos-
5 ing said openings and side walls of less
height than the height of said drawer spaces,
said first-named flanges being provided with
mating apertures, and securing means be-
tween adjacent cabinet-sections received
10 through said apertures, and said apertures

and securing means located within the lat-
eral projections of said drawer spaces above
said side walls of said drawers.

In testimony whereof, I have signed my
name hereto in the presence of two subscrib- 15
ing witnesses.

PAUL S. MILLICE.

Witnesses:

GEO. C. KUHN,
JACOB A. HOLLANDER.